

Attorney Docket RSW920010036US1
Serial No. 09/824,298

Remarks

Claims 1-9, 12, 23-31, 33-43, 45-47 stand rejection under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,491,801 to Jain et al., U.S. Patent No. 6,820,128 to Firoiu et al. and U.S. Patent No. 6,643,292 to Chapman et al.; claims 3, 4, 9, 25, 26, 31, 37, 38 and 43 stand rejected under 35 U.S.C. § 103 as being unpatentable over the '801, '128 and '292 patents and U.S. Patent No. 6,646,987 to Qaddoura; claims 10, 32 and 44 stand rejected under 35 U.S.C. § 103 as being unpatentable over the '801, '128 and '292 patents and U.S. Patent No. 4,771,391 to Blasbalg; and claims 13-22 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,205,120 to Packer et al. in view of the '801, '128 and '292 patents.

With this paper, claim 1 has been as amended to recite:

A method in a data processing system for managing traffic in a network data processing system, the method comprising:
monitoring the traffic for a plurality of TCP connections or UDP associations through a given network path; and
~~responsive to prior to sending a packet for on~~ a particular TCP connection or UDP association within the plurality of TCP connections or UDP associations, determining if the packet will cause causing the traffic for the network path to exceed a level of traffic allowed and, if the packet will cause the traffic for the network path to exceed the level of traffic allowed, reducing an amount of bandwidth available to the traffic for one of the particular TCP connection or UDP association and another TCP connection or UDP association using an action based on a transmission protocol corresponding to the one TCP connection or UDP association.

Similar amendments have been made to independent claims 13, 23 and 35. Support for these amendments can be found in paragraphs 38, 48, 49 and Figs. 4 and 8 of US 2002/0141341 A1. No new matter is involved.

Claim 7, as amended, now recites:

A method in a data processing system for managing traffic in a network data processing system, the method comprising:
monitoring traffic for each of a plurality of TCP connections or UDP associations through a given network path; and

Attorney Docket RSW920010036US1
Serial No. 09/824,298

responsive to prior to sending a packet on a selected TCP connection or UDP association within the plurality of TCP connections and UDP associations, determining if the packet will cause the traffic for a the network path selected TCP connection or UDP association exceeding to exceed a threshold and, if the packet will cause the traffic for the network path to exceed the threshold, further determining if the packet will cause the traffic for the selected TCP connection or UDP association to exceed its fair share amount of the network path and if so, reducing the traffic for the selected TCP connection or UDP association using an action based on a transmission protocol corresponding to the selected TCP connection or UDP association.

Similar amendments have been made to claims 18, 29 and 41. Support for these amendments can be found in paragraphs 29, 38, 48, 49 and Figs. 4 and 8 of US 2002/0141341

A1. No new matter is involved.

As noted above, claims 1-9, 12, 23-31, 33-43, 45-47 stand rejection under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,491,801 to Jain et al., U.S. Patent No. 6,820,128 to Firoiu et al. and U.S. Patent No. 6,643,292 to Chapman et al.; claims 3, 4, 9, 25, 26, 31, 37, 38 and 43 stand rejected under 35 U.S.C. § 103 as being unpatentable over the '801, '128 and '292 patents and U.S. Patent No. 6,646,987 to Qaddoura; claims 10, 32 and 44 stand rejected under 35 U.S.C. § 103 as being unpatentable over the '801, '128 and '292 patents and U.S. Patent No. 4,771,391 to Blasbalg; and claims 13-22 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,205,120 to Packer et al. in view of the '801, '128 and '292 patents.

Jain et al. disclose in column 4, lines 52-62:

a router determines the existence of an overload condition by detecting when it is operating beyond an estimated capacity level, it calculates a fair share of the estimated capacity level for each end system sending packets to the router and then, it identifies which end systems are sending more than a fair share of traffic received by the router. By conditioning a flag in the packets coming from the identified end systems, the router generates feedback indicating that the identified end systems are contributing to the overload condition in the router and that they should decrease their output.

Attorney Docket RSW920010036US1
Serial No. 09/824,298

Nowhere does Jain et al. disclose monitoring the traffic for a plurality of TCP connections or UDP associations through a given network path as required by independent claims 1, 13, 23 and 35 or monitoring traffic for each of a plurality of TCP connections or UDP associations through a given network path, as required by independent claims 7, 18, 29 and 41. Rather, Jain et al. only teach monitoring the traffic passing through a router sent by a plurality of end systems. Nowhere does Chapman et al. disclose, prior to sending a packet on a particular TCP connection or UDP association within a plurality of TCP connections or UDP associations, determining if the packet will cause the traffic for a network path to exceed a level of traffic allowed, as required by independent claims 1, 13, 23 and 35, or prior to sending a packet on a selected TCP connection or UDP association within the plurality of TCP connections and UDP associations, determining if the packet will cause the traffic for a network path to exceed a threshold, as required by independent claims 7, 18, 29 and 41. Instead, Chapman et al. teach encapsulating one or more sets of customer data and sending the encapsulated data using conventional TCP algorithms using inherent TCP capabilities, see column 6, lines 58-61 and column 7, lines 18-30. Conventional TCP algorithms do not determine, prior to sending a packet on a particular TCP connection or UDP association within a plurality of TCP connections or UDP associations, if the packet will cause the traffic for a network path to exceed a level of traffic allowed. Conventional TCP algorithms also do not determine, prior to sending a packet on a selected TCP connection or UDP association within a plurality of TCP connections and UDP associations, if the packet will cause the traffic for the network path to exceed a threshold. Nor do Firoiu et al., Qaddoura or Blasbalg disclose, teach or suggest these aspects of the present invention. Accordingly, it is submitted that the Jain et al. patent, the Firoiu et al. patent, the Chapman et al. patent, the Qaddoura patent and the Blasbalg patent, whether taken singly or in combination, do not disclose, teach or suggest the subject matter set out in claims 1-10, 12 and 23-47.

As also noted above, claims 13-22 stand rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,205,120 to Packer et al. in view of the '801, '128 and '292 patents. The Packer et al. patent lacks a teaching of monitoring the traffic for a plurality of TCP connections or UDP associations through a given network path as required by independent claim

Attorney Docket RSW920010036US1
Serial No. 09/824,298

13 or monitoring traffic for each of a plurality of TCP connections or UDP associations through a given network path, as required by independent claim 18. Nor do Jain et al. or Firoiu et al. teach this aspect of the present invention. Chapman et al. do not disclose, prior to sending a packet on a particular TCP connection or UDP association within the plurality of TCP connections or UDP associations, determining if the packet will cause the traffic for a network path to exceed a level of traffic allowed, as required by independent claim 13, or prior to sending a packet on a selected TCP connection or UDP association, determining if the packet will cause the traffic for a network path to exceed a threshold, as required by independent 18. Accordingly, it is submitted that the Packer et al. patent, the Jain et al. patent, the Firoiu et al. patent and the Chapman et al. patent, whether taken singly or in combination, do not disclose, teach or suggest the subject matter set out in claims 13-22.

With this paper, claim 46 has been amended. Support for the amendments set out in claim 46 can be found in paragraph 29 of US 2002/0141341 A1. No new matter is involved.

In view of the above remarks, applicants submit that claims 1-10 and 12-47 define patentably over the prior art. Early notification of allowable subject matter is respectfully requested.

Respectfully submitted,
Stevens & Showalter, L.L.P.

By



Robert L. Showalter
Registration No. 33,579

7019 Corporate Way
Dayton, OH 45459-4238
Telephone: 937-438-6848
Fax: 937-438-2124
Email: rshowalter@sspatlaw.com